Annual Drinking Water Quality Report for 2009

Cedar Ridge Children's Home & School, Inc.

PWSID 0210020

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you everyday. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your drinking water. Our water source is from three wells located on the Cedar Ridge property which draws from underground aquifers at varying depths from 400 to'525 feet. From the wells the water is chlorinated and stored in a 5,800 gallon storage tank. It is then treated by a water softener system, UV light, and a filter system that removes microbes to provide safe drinking water. This filter removes cysts and other harmful organisms.

Do I need to take precautions?

Some people may be vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk factor of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Eater Hotline (800-426-4791).

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling Environmental Protection Agency (EPA) Safe Drinking Water Hotline (800^-426-4791): The sources of drinking water .(both tap and bottled) include rivers, lakes, ponds, reservoirs, springs, and wells. AS water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can-pick up substances resulting from the presence of animals or from human activity. Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm runoff, and residential uses. Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by- products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems. Radioactive contaminants, which can be naturally occurring or be a result of oil and gas production and mining activities. In order to ensure that the tap water is safe to drink. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Cedar Ridge Children's Home & School routinely monitors for contaminants in your drinking water according to the FEDERAL and State laws. This table shows results of our monitoring for the period of Jan. 1 to Dec. 31 2008.

In this table you will find many terms and abbreviations you might not be familiar with. To help you understand these terms we've provided
the following definitions: ^

Parts per million (ppm) or milligrams per liter (mg/1)- one part per million corresponds to one minute in two years, or a single penny in 10,000!

Parts per billion (ppb) or micrograms per liter- one part per billion corresponds to one minute in 2,000 years, or a single penny in - 10,000,000

Picocuries per liter (pCI/L) - a measure of radioactivity in water.

Action Level- the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level- The "Maximum Allowed^ (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using best available treatment technology. -' 'Maximum Contaminant Level Goal- The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	L MCL	Likely source of contaminant
Microbiological Contaminants						
Total Coliform Bacteria	N	<1		0	presence of coli-form bacteria in 5% of monthly	Naturally present in the environment
Fecal coliform and Ecoli	N	<1		0	routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E coli positive	Human and animal feces
Radioactive Contaminants						
Beta/photon emitters	N	3	mrem/yr	0	4	Decay of natural and manmade depos ts
Alpha emitters	N	5	pCi/l	0	15	Erosion of natural deposits
Synthetic Organic Contaminants incl. Pesticides and Herbicides						
3-Hydroxycarbofuran 2006	N	<5	ppb	40	40	
TTHM(Dist.) 2008	N	5. 46	ppb	0	80	By product of drinking water chlorination
HAAS Halo.	N	0	ppb	0	60	
Inorganic Contaminants						
Copper (Dist.) 90 percentile 2007	N	0.388	mg/l	1.3	AL=1.3	
Lead (Dist.) 90 percentile 2007	N	0.003	mg/l	0	AL=15	
Nitrate 2008 (as nitrogen	N	3.6	mg/l	10	410	
Fluoride 2007	N	0.7	mg/l.	1 4	4	
Unregulated Contaminants						
Sodium 2007	N	34.3	ppm	n/a	n/a	Erosion of natural dep
Chloroform 2007	N	4.7	ppb	n/a	n/a	By product of chlorine
Bromodichloromethane	N	1.9	PPb	n/a	n/a	
Dibromochloromethaneta	N	2	ppb	n/a	n/a	

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at. the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. _____

"If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Cedar Ridge Children's Home and School, Inc., is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking, water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.sov/safewater/lead.ff

If you have any questions about this report contact: Cedar Ridge Home & School
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Health Effects of Lead in Drinking Water

The U.S. General Accounting Office reports that there are serious deficiencies in water treatment plants in 75% of the states. More than 120 million people (about 50% of the population) may get unsafe water according to a study conducted by the Natural Resources Defense Council.

U.S. Health Officials estimate 900,000 people each year become ill - and possibly 900 die - from waterborne disease. The General Accounting Office estimates 66% of Safe Drinking Water Act violations aren't reported.

The contamination of water is directly related to the degree of contamination of our environment. Rainwater flushes airborne pollution from the skies, and then washes over the land before running into the, rivers, aquifers, and lakes that supply our drinking-water. All of the chemicals generated by man will eventually end up in our water supplies. Nearly 70% of Americans are worried about the quality of their drinking water, yet few realize that water that looks tastes and smells good can be hazardous to your health.

Lead is considered the number one health threat to children, and the effects of lead poisoning can last a lifetime. Not only does lead poisoning stunt a child's growth, damage the nervous system, and cause learning disabilities, but it is also now linked to crime and anti-social behavior in children.

Lead is a soft material that is resistant to corrosion. Lead has been used by many civilizations to transport water, and used as early as the times of Rome. Lead is used primarily for lead pipe line, lead solder and brass fixtures. Lead is also added to metal alloys such as brass and bronze, as such, it is used in water faucets and fixtures. Lead has a variety of other uses. *Lead is a toxic substance and has adverse effects on human health. Even low levels in drinking water, when continuously ingested, will cause a deterioration in health.* Exposure to lead produces many different health problems. These effects are cumulative and usually are irreversible, especially in sensitive populations such as fetuses, children, and pregnant women.

It has long been known that lead in drinking water is highly toxic, and recent developments have increased the level of concern. Contamination of drinking water with significant levels of lead is much more widespread than previously believed, and levels that were once considered safe are now know to be health threats.Exposure to lead is cumulative over tune. *High concentrations of lead in the body can cause death or permanent damage to the central nervous system, the brain, and kidneys. This damage commonly results in behavior and learning problems (such as hyper activity),memory and concentration problems, high blood pressure, hear ing problems, headaches, slowed growth, reproductive problems in men and women, digestive problems, muscle and joint pain.*

Infants, children, pregnant women, and fetuses are more vulnerable to lead exposure than others because the lead is more easily absorbed into the sensitive tissue of actively growing bodies. An equal concentration of lead is more destructive in a child than in an adult. Pregnant women should also be especially cautious about lead exposure, because it can cause premature birth, and reduce the birth weight of babies.

The U.S. Center for Disease Control reports approximately 7,500 cases of illness linked to drinking water in the United States each year. This number is much lower than what is generally accepted because drinking water contaminants are often not considered in the diagnoses of illnesses. ***Lead is "a highly toxic metal the agency considers a major public health threat.", according to the U.S. Environmental***

Protection Agency (EPA). The national Centers for Disease Control considers lead to be the country's number one preventable pediatric health problem. More than 30 Million Americans are drinking water with lead levels in excess of the Maximum Contaminant Level set by the EPA.

According to the recently released lead toxicological profile for lead from Agency for Toxic Substances and Disease Registry (ATSDR), *the adverse health effects of lead range from slight increases in blood pressure at 10 ug/dL to severe retardation and even death at very high blood-lead levels of 100 ug/dL. High lead levels in pregnant women increase the risk of complications in their pregnancies, and damage to the fetuses. High lead in men can cause heart attack, high blood pressure, strokes, and hypertension.*

Over 98% of homes in the U.S. have pipes that contain lead or lead solder. The main sources are lead pipes, or copper pipes connected by lead solder, and from brass faucets, which also contain lead (most chrome plated faucets are made of brass which is 8% lead). The level of lead in tap water should not exceed 5 parts per billion.

Here is what the experts say:

According to the USA TODAY, May 12, 1993, *"Drinking water supplied to 30 million people in 819 cities contains unhealthy levels of lead"*, an unprecedented new EPA study says. Children are especially susceptible to lead poisoning, which can impair mental and physical development.".

Children's lead exposure is linked to crime, according to the Wisconsin State Journal, February 7,1996. " *Researchers using a new test that looks for lead in the bones instead of the blood say exposure to the toxic metal may contribute to crime and anti-social behavior in children.".*

Health Effects of Lead Poisoning and Lead in Drinking Water

Lead is a common, natural, and often useful metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery porcelain pewter, and water.

Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells, and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination - like dirt and dust - that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

Lead in Drinking Water as a source of lead poisoning

(i) Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

(ii) Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines).

In 1986, Congress banned the use of lead solder containing greater than 0.2% lead and restricted the lead content of faucets, pipes; and other plumbing materials to 8.0%.

(iii) When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning or later in the afternoon after returning from work or school can contain fairly high levels of lead.

Steps You Can Take in the Home to Reduce Exposure to Lead in Drinking Water

(i) Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water. Some local laboratories that can provide this information are listed at the end of this booklet. For more information on having your water tested, please call your health department or water department.

(ii) If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take the following precautions:

(A) Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds.

If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking.

Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. It usually uses less than one or two gallons of water and costs less than .42 cents per month. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first-flush water to wash the dishes or water the plants.

If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more and sometimes larger pipes than smaller buildings. Ask your landlord for help in locating the source of the lead and for advice on reducing the lead level.

(B) Try not to cook with or drink water from the hot water tap. Hot water can dissolve more lead

© Your local health department can provide you with information about the health effects of lead and how you can have your child's blood tested.

What to Do About Lead in Drinking Water

The United States Environmental Protection Agency (EPA) and various >U.S. municipal water suppliers are concerned about lead in drinking water.

In 1992, as a result of legislation written in Congress, a new US EPA standard for lead and copper became effective. This standard is intended to help communities around the nation reduce their exposure to lead/copper in drinking water, and there by, lower their exposure to lead/copper from all sources, including air, lead based paint, soil and dust. Lead paint is the main source of lead poisoning; however, lead contamination from water can contribute 10 to 20 percent of a person's exposure.

ALTHOUGH WATER SUPPLIED FROM YOUR WATER TREATMENT PLANT MAY BE FREE FROM LEAD/COPPER*, contamination from your piping system may cause lead/copper to dissolve (leach) into your water supply if: * You have a lead service line connecting your home to the water main in the street; and/or * Your home has lead water supply pipes; and/or * You have lead containing soldered joints in your copper supply pipes (installed from 1983-86); and/or * You have plumbing fixtures containing lead. * In rare cases some lead leaching may take place from piping in the street if it is a low flow area, i.e.; dead end streets.

Although most homes have very low levels of tead in their drinking water, some homes in some communities have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mgL).

Under Federal Law water suppliers are required to have a program in place to minimize lead in drinking water by January 1,1996. This program includes corrosion control treatment, source water treatment, and public education. We are also required to replace each lead service line .

© Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes or homes in which the plumbing has recently been replaced by removing the faucet strainers from all taps and running the water for 3 to 5 minutes, thereafter, periodically remove the strainers arid flush out any debris that has accumulated over time.

(D) If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify your health department about the violation,

(E) Determine whether or not the service line that connects your home or apartment to the water line is made of lead. The best way to determine if your service line is made of lead is by either hiring a licensed plumber, or a private home inspector or building inspector to inspect the line or by contacting the plumbing contractor who installed the line.

You can identify the plumbing contractor by checking the city's record of building permits, which should he maintained in the files of the City of Poughkeepsie Building Department. A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes, or pipe fittings that contain lead.

The public water system that delivers water to your home should also maintain records of the materials located in the distribution system.

If the service line that connects your dwelling to the water main contributes more than 15 ppb to drinking water, after the (possibly) required comprehensive treatment program is in place, the municipality is required to replace the line.

If the line is only partially controlled by the municipality, they are required to provide you with information on how to replace your portion of the service line, and offer to replace that portion of the line at your expense and take a follow-up tap water sample within 14 days of the replacement. Acceptable replacement alternatives include copper, steel, iron, and plastic pipes.

(F) Have an electrician check your wiring. If grounded wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself, because improper grounding can cause electrical shock and fire hazards.

(iii) The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentration in excess of 15 ppb after flushing or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:

(A) Purchase or lease a home treatment device. Home treatment devices are limited in that each unit treats only the water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap, however, all lead reduction claims should he investigated. Be sure to check the actual performance of a specific home treatment device before and after installing the unit.

(B) Purchase bottled water for drinking and cooking.